

**I claim:**

1. An integrated multimedia microcomputer device comprising:
  - a memory for storage of at least an operation system and a plurality of application programs;
  - 5 a system-on-a-chip including a general purpose processor electrically connected with a audio processor and an video processor, said general purpose processor being used for execution and processing of said operation system and said application programs, said audio processor being used for encoding/decoding and processing of audio data, said video processor being
  - 10 used for encoding/decoding and processing of video data;
  - a audio/video output interface connected with said audio processor and said video processor for output of said audio and video data;
  - at least a storage medium interface connected with said general purpose processor for electric connection with at least a memory medium; and
  - 15 a plurality of connection interfaces connected with said system-on-a-chip for electric connection with a plurality of external electronic devices, said general purpose processor being used to accomplish signal connection with said electronic devices through execution of said application programs.
2. The integrated multimedia microcomputer device as claimed in claim 1,
- 20 wherein said operation system and said application programs are downloaded from said external electronic devices.
3. The integrated multimedia microcomputer device as claimed in claim 1, wherein said operation system and said application programs are built in said memory.
- 25 4. The integrated multimedia microcomputer device as claimed in claim 1,

wherein said audio/video output device comprises:

a audio output interface connected with said audio processor for connection with a audio output device for outputting audio; and

an video output interface connected with said video processor for connection with a display for displaying video.

5        5. The integrated multimedia microcomputer device as claimed in claim 4, wherein said audio output device is selected from the group consisting of a car acoustic and a loudspeaker.

6. The integrated multimedia microcomputer device as claimed in claim 4,  
10        wherein said display is selected from the group consisting of a liquid crystal display and a television.

7. The integrated multimedia microcomputer device as claimed in claim 1, wherein said operation system is a real-time operation system.

8. The integrated multimedia microcomputer device as claimed in claim 1,  
15        wherein said application programs include a GPS navigation program.

9. The integrated multimedia microcomputer device as claimed in claim 8, wherein said general purpose processor performs a plurality of GPS navigation processing including positioning coordinate calculation, navigation route plan, map data search and map display through said GPS  
20        navigation program.

10. The integrated multimedia microcomputer device as claimed in claim 1, which is installed in a car.

11. The integrated multimedia microcomputer device as claimed in claim 1, wherein the audio file format processed by said audio processor is selected  
25        from the group consisting of MP3, AC3, DTS, WMA and Karaoke.

12. The integrated multimedia microcomputer device as claimed in claim 1,  
wherein said audio processor can further perform the conversion from text to  
voice (Text-to-Speech).
13. The integrated multimedia microcomputer device as claimed in claim 1,  
5 wherein said audio processor can further perform the calculation of GPS  
positioning coordinates.
14. The integrated multimedia microcomputer device as claimed in claim 1,  
wherein the video file format processed by said video processor is selected  
from the group consisting of MPEG1, MPEG2, MPEG4, Divx, JPEG,  
10 M-JPEG, and WMV.
15. The integrated multimedia microcomputer device as claimed in claim 1,  
wherein said storage medium is selected from the group consisting of hard  
disk drive, optical disc drive, and memory card.
16. The integrated multimedia microcomputer device as claimed in claim 15,  
15 wherein the format of optical disc read/written by said optical disc drive is  
selected from the group consisting of DVD, VCD, CD and MP3.
17. The integrated multimedia microcomputer device as claimed in claim 1,  
wherein said storage medium interface is a memory card slot.
18. The integrated multimedia microcomputer device as claimed in claim 17,  
20 wherein said memory card slot can provide insertion of memory cards of  
different formats.
19. The integrated multimedia microcomputer device as claimed in claim 18,  
wherein said memory card is selected from the group consisting of Secure  
Digital card, Multi Media card, Smart Media card, Memory Stick card,  
25 Compact Flash card, XD picture card and Micro Drive.

20. The integrated multimedia microcomputer device as claimed in claim 17,  
wherein said connection interface is selected from the group consisting of  
USB, PCI, IDE, RS232, PS/2, PCMCIA, ISA and IR.

21. The integrated multimedia microcomputer device as claimed in claim 17,  
5 wherein said external electronic device is selected from the group consisting  
of GPS module, mobile communication module, Joystick, remote controller,  
mini-keyboard, tape recorder, mouse, and keyboard.

22. The integrated multimedia microcomputer device as claimed in claim 21,  
wherein said mobile communication module is selected from the group  
10 consisting of GSM, GPRS, CDMA and pager.